

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/787,082A
Source: 1 Fw/6
Date Processed by STIC: 2/15/05

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 02/15/2005

PATENT APPLICATION: US/09/787,082A

TIME: 14:30:53

Input Set : D:\DAVI0005.ST25.txt

Output Set: N:\CRF4\02152005\I787082A.raw

3 <110> APPLICANT: Craik, David James
 4 Daly, Norelle Lee
 5 Nielsen, Katherine Justine
 7 <120> TITLE OF INVENTION: CYCLISED CONOTOXIN PEPTIDES
 9 <130> FILE REFERENCE: DAVI-0005
 11 <140> CURRENT APPLICATION NUMBER: US 09/787,082A
 12 <141> CURRENT FILING DATE: 2001-06-14
 14 <150> PRIOR APPLICATION NUMBER: PCT/AU99/00769
 15 <151> PRIOR FILING DATE: 1999-09-14
 17 <150> PRIOR APPLICATION NUMBER: AU PP 5895
 18 <151> PRIOR FILING DATE: 1998-09-14
 20 <160> NUMBER OF SEQ ID NOS: 29
 22 <170> SOFTWARE: PatentIn version 3.3
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 7
 26 <212> TYPE: PRT
 27 <213> ORGANISM: Artificial
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: Synthetic Construct
 32 <400> SEQUENCE: 1
 34 Thr Arg Asn Gly Leu Pro Gly
 35 1 5
 38 <210> SEQ ID NO: 2
 39 <211> LENGTH: 4
 40 <212> TYPE: PRT
 41 <213> ORGANISM: Artificial
 43 <220> FEATURE:
 44 <223> OTHER INFORMATION: Synthetic Construct
 46 <400> SEQUENCE: 2
 48 Thr Arg Asn Gly
 49 1
 52 <210> SEQ ID NO: 3
 53 <211> LENGTH: 7
 54 <212> TYPE: PRT
 55 <213> ORGANISM: Artificial
 57 <220> FEATURE:
 58 <223> OTHER INFORMATION: Synthetic Construct
 60 <400> SEQUENCE: 3
 62 Thr Arg Gly Gly Leu Pro Val
 63 1 5
 66 <210> SEQ ID NO: 4
 67 <211> LENGTH: 3
 68 <212> TYPE: PRT

P.6

RAW SEQUENCE LISTING

DATE: 02/15/2005

PATENT APPLICATION: US/09/787,082A

TIME: 14:30:53

Input Set : D:\DAVI0005.ST25.txt

Output Set: N:\CRF4\02152005\I787082A.raw

```

69 <213> ORGANISM: Artificial
71 <220> FEATURE:
72 <223> OTHER INFORMATION: Synthetic Construct
74 <400> SEQUENCE: 4
76 Thr Asn Gly
77 1
80 <210> SEQ ID NO: 5
81 <211> LENGTH: 32
82 <212> TYPE: PRT
83 <213> ORGANISM: Artificial
85 <220> FEATURE:
86 <223> OTHER INFORMATION: cyclic conotoxin peptide
88 <400> SEQUENCE: 5
90 Cys Lys Gly Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys
91 1          5          10          15
94 Thr Gly Ser Cys Arg Ser Gly Lys Cys Thr Arg Asn Gly Leu Pro Gly
95          20          25          30
98 <210> SEQ ID NO: 6
99 <211> LENGTH: 29
100 <212> TYPE: PRT
101 <213> ORGANISM: Artificial
103 <220> FEATURE:
104 <223> OTHER INFORMATION: cyclic conotoxin peptide
106 <400> SEQUENCE: 6
108 Cys Lys Gly Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys
109 1          5          10          15
112 Thr Gly Ser Cys Arg Ser Gly Lys Cys Thr Arg Asn Gly
113          20          25
116 <210> SEQ ID NO: 7
117 <211> LENGTH: 32
118 <212> TYPE: PRT
119 <213> ORGANISM: Artificial
121 <220> FEATURE:
122 <223> OTHER INFORMATION: cyclic conotoxin peptide
124 <400> SEQUENCE: 7
126 Gly Leu Pro Val Cys Lys Gly Lys Gly Ala Lys Cys Ser Arg Leu Met
127 1          5          10          15
130 Tyr Asp Cys Cys Thr Gly Ser Cys Arg Ser Gly Lys Cys Thr Arg Gly
131          20          25          30
134 <210> SEQ ID NO: 8
135 <211> LENGTH: 19
136 <212> TYPE: PRT
137 <213> ORGANISM: Artificial
139 <220> FEATURE:
140 <223> OTHER INFORMATION: cyclic conotoxin peptide
142 <400> SEQUENCE: 8
144 Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu His Ser Asn Leu Cys
145 1          5          10          15
148 Thr Asn Gly

```

RAW SEQUENCE LISTING

DATE: 02/15/2005

PATENT APPLICATION: US/09/787,082A

TIME: 14:30:53

Input Set : D:\DAVI0005.ST25.txt

Output Set: N:\CRF4\02152005\I787082A.raw

```

152 <210> SEQ ID NO: 9
153 <211> LENGTH: 19
154 <212> TYPE: PRT
155 <213> ORGANISM: Artificial
157 <220> FEATURE:
158 <223> OTHER INFORMATION: cyclic conotoxin peptide
160 <400> SEQUENCE: 9
162 Cys Cys Ser Asn Pro Val Cys His Leu Glu His Ser Asn Leu Cys Thr
163 1          5          10          15
166 Asn Gly Gly
170 <210> SEQ ID NO: 10
171 <211> LENGTH: 25
172 <212> TYPE: PRT
173 <213> ORGANISM: Conus magus
175 <400> SEQUENCE: 10
177 Cys Lys Gly Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys
178 1          5          10          15
181 Thr Gly Ser Cys Arg Ser Gly Lys Cys
182          20          25
185 <210> SEQ ID NO: 11
186 <211> LENGTH: 25
187 <212> TYPE: PRT
188 <213> ORGANISM: Conus magus
191 <220> FEATURE:
192 <221> NAME/KEY: MISC_FEATURE
193 <222> LOCATION: (7)..(7)
194 <223> OTHER INFORMATION: X = ornithine
196 <400> SEQUENCE: 11
W--> 198 Cys Lys Gly Lys Gly Ala Xaa Cys Ser Arg Leu Met Tyr Asp Cys Cys
199 1          5          10          15
202 Thr Gly Ser Cys Arg Ser Gly Lys Cys
203          20          25
206 <210> SEQ ID NO: 12
207 <211> LENGTH: 27
208 <212> TYPE: PRT
209 <213> ORGANISM: Conus geographus
212 <220> FEATURE:
213 <221> NAME/KEY: MISC_FEATURE
214 <222> LOCATION: (4)..(4)
215 <223> OTHER INFORMATION: X = ornithine
217 <220> FEATURE:
218 <221> NAME/KEY: MISC_FEATURE
219 <222> LOCATION: (10)..(10)
220 <223> OTHER INFORMATION: X = ornithine
222 <220> FEATURE:
223 <221> NAME/KEY: MISC_FEATURE
224 <222> LOCATION: (21)..(21)
225 <223> OTHER INFORMATION: X = ornithine
227 <400> SEQUENCE: 12

```

RAW SEQUENCE LISTING

DATE: 02/15/2005

PATENT APPLICATION: US/09/787,082A

TIME: 14:30:53

Input Set : D:\DAVI0005.ST25.txt

Output Set: N:\CRF4\02152005\I787082A.raw

W--> 229 Cys Lys Ser Xaa Gly Ser Ser Cys Ser Xaa Thr Ser Tyr Asn Cys Cys
 230 1 5 10 15
 233 Arg Ser Cys Asn Xaa Tyr Thr Lys Arg Cys Tyr
 234 20 25
 237 <210> SEQ ID NO: 13
 238 <211> LENGTH: 24
 239 <212> TYPE: PRT
 240 <213> ORGANISM: Conus striatus
 243 <220> FEATURE:
 244 <221> NAME/KEY: MISC_FEATURE
 245 <222> LOCATION: (7)..(7)
 246 <223> OTHER INFORMATION: X = ornithine
 248 <400> SEQUENCE: 13

W--> 250 Cys Arg Ser Ser Gly Ser Xaa Cys Gly Val Thr Ser Ile Cys Cys Gly
 251 1 5 10 15
 254 Arg Cys Tyr Arg Gly Lys Cys Thr
 255 20
 258 <210> SEQ ID NO: 14
 259 <211> LENGTH: 26
 260 <212> TYPE: PRT
 261 <213> ORGANISM: Conus striatus
 263 <400> SEQUENCE: 14
 265 Cys Lys Leu Lys Gly Gln Ser Cys Arg Lys Thr Ser Tyr Asp Cys Cys
 266 1 5 10 15
 269 Ser Gly Ser Cys Gly Arg Ser Gly Lys Cys
 270 20 25
 273 <210> SEQ ID NO: 15
 274 <211> LENGTH: 29
 275 <212> TYPE: PRT
 276 <213> ORGANISM: Conus geographus
 279 <220> FEATURE:
 280 <221> NAME/KEY: MISC_FEATURE
 281 <222> LOCATION: (4)..(4)
 282 <223> OTHER INFORMATION: X = ornithine
 284 <220> FEATURE:
 285 <221> NAME/KEY: MISC_FEATURE
 286 <222> LOCATION: (7)..(7)
 287 <223> OTHER INFORMATION: X = ornithine
 289 <400> SEQUENCE: 15

W--> 291 Cys Lys Ser Xaa Gly Thr Xaa Cys Ser Arg Gly Met Arg Asp Cys Cys
 292 1 5 10 15
 295 Thr Ser Cys Leu Leu Tyr Ser Asn Lys Cys Arg Arg Tyr
 296 20 25
 299 <210> SEQ ID NO: 16
 300 <211> LENGTH: 29
 301 <212> TYPE: PRT
 302 <213> ORGANISM: Conus geographus
 305 <220> FEATURE:
 306 <221> NAME/KEY: MISC_FEATURE

RAW SEQUENCE LISTING

DATE: 02/15/2005

PATENT APPLICATION: US/09/787,082A

TIME: 14:30:53

Input Set : D:\DAVI0005.ST25.txt

Output Set: N:\CRF4\02152005\I787082A.raw

```

307 <222> LOCATION: (4)..(4)
308 <223> OTHER INFORMATION: X = ornithine
310 <220> FEATURE:
311 <221> NAME/KEY: MISC_FEATURE
312 <222> LOCATION: (7)..(7)
313 <223> OTHER INFORMATION: X = ornithine
315 <400> SEQUENCE: 16
W--> 317 Cys Lys Ser Xaa Gly Thr Xaa Cys Ser Arg Gly Met Arg Asp Cys Cys
318 1 5 10 15
321 Thr Ser Cys Leu Ser Tyr Ser Asn Lys Cys Arg Arg Tyr
322 20 25
325 <210> SEQ ID NO: 17
326 <211> LENGTH: 27
327 <212> TYPE: PRT
328 <213> ORGANISM: Conus tulipa
331 <220> FEATURE:
332 <221> NAME/KEY: MISC_FEATURE
333 <222> LOCATION: (4)..(4)
334 <223> OTHER INFORMATION: X = ornithine
336 <220> FEATURE:
337 <221> NAME/KEY: MISC_FEATURE
338 <222> LOCATION: (10)..(10)
339 <223> OTHER INFORMATION: X = ornithine
341 <220> FEATURE:
342 <221> NAME/KEY: MISC_FEATURE
343 <222> LOCATION: (21)..(21)
344 <223> OTHER INFORMATION: X = ornithine
346 <400> SEQUENCE: 17
W--> 348 Cys Leu Ser Xaa Gly Ser Ser Cys Ser Xaa Thr Ser Tyr Asn Cys Cys
349 1 5 10 15
352 Arg Ser Cys Asn Xaa Tyr Ser Arg Lys Cys Arg
353 20 25
356 <210> SEQ ID NO: 18
357 <211> LENGTH: 27
358 <212> TYPE: PRT
359 <213> ORGANISM: Conus purpurascens
362 <220> FEATURE:
363 <221> NAME/KEY: MISC_FEATURE
364 <222> LOCATION: (4)..(4)
365 <223> OTHER INFORMATION: X = ornithine
367 <400> SEQUENCE: 18
W--> 369 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys
370 1 5 10 15
373 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
374 20 25
377 <210> SEQ ID NO: 19
378 <211> LENGTH: 13
379 <212> TYPE: PRT
380 <213> ORGANISM: Conus geographus

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/787,082A

DATE: 02/15/2005
TIME: 14:30:54

Input Set : D:\DAVI0005.ST25.txt
Output Set: N:\CRF4\02152005\I787082A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Xaa Pos. 7
Seq#:12; Xaa Pos. 4,10,21
Seq#:13; Xaa Pos. 7
Seq#:15; Xaa Pos. 4,7
Seq#:16; Xaa Pos. 4,7
Seq#:17; Xaa Pos. 4,10,21
Seq#:18; Xaa Pos. 4
Seq#:25; Xaa Pos. 6,7,17
Seq#:26; Xaa Pos. 6,7,17
Seq#:27; Xaa Pos. 6,7,17
Seq#:28; Xaa Pos. 8,18

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9

VERIFICATION SUMMARY

DATE: 02/15/2005

PATENT APPLICATION: US/09/787,082A

TIME: 14:30:54

Input Set : D:\DAVI0005.ST25.txt

Output Set: N:\CRF4\02152005\I787082A.raw

L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
M:341 Repeated in SeqNo=12
L:250 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:291 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:348 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
M:341 Repeated in SeqNo=17
L:369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:465 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
M:341 Repeated in SeqNo=25
L:491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
M:341 Repeated in SeqNo=26
L:517 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
M:341 Repeated in SeqNo=27
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
M:341 Repeated in SeqNo=28